SEQUENCE LISTING

<110> Miller, Barbara
Osmani, Stephen
Clawson, Gary
Zhang, Min-Ying
Norris, James

<120> Use of Human Homolog Of A Nuclear Migration Gene For Treatment And Diagnosis Of Cancer

<130> PSU-0016

<140> 09/623,568
<141> 2001-03-23

<150> 60/076,885
<151> 1998-03-05

<150> PCT US99/04996
<151> 1999-03-05

<160> 16

<170> PatentIn version 3.1

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aagaagggat ggcagagaag cttatcacac agactttcag ccaccacaat cagctggcac 240

agaagacccg gcgggagaag agagcccggc aggaggccga gcggcgggag aaggcggagc 300

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atcatgaggc ccagctcaag aacggcagcc ttgactcccc agggaagcag gatactgagg 480

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Phe Ser Phe Leu Arg Arg Lys Thr Asp Phe Phe Ile Gly Gly Glu Glu
        35                  40                  45

Gly Met Ala Glu Lys Leu Ile Thr Gln Thr Phe Ser His His Asn Gln
    50                  55                  60

Leu Ala Gln Lys Thr Arg Arg Glu Lys Arg Ala Arg Gln Glu Ala Glu
65                  70                  75                  80

Arg Arg Glu Lys Ala Glu Arg Ala Ala Arg Leu Ala Lys Glu Ala Lys
                85                  90                  95

Ser Glu Thr Ser Gly Pro Gln Ile Lys Glu Leu Thr Asp Glu Glu Ala
            100                 105                 110

Glu Arg Leu Gln Leu Glu Ile Asp Gln Lys Lys Asp Ala Glu Asn His
        115                 120                 125

Glu Ala Gln Leu Lys Asn Gly Ser Leu Asp Ser Pro Gly Lys Gln Asp
    130                 135                 140

Thr Glu Glu Asp Glu Glu Glu Asp Glu Lys Asp Lys Gly Lys Leu Lys
145                 150                 155                 160

Pro Asn Leu Gly Asn Gly Ala Asp Leu Pro Asn Tyr Arg Trp Thr Gln
                165                 170                 175

Thr Leu Ser Glu Leu Asp Leu Ala Val Pro Phe Cys Val Asn Phe Arg
            180                 185                 190

Leu Lys Gly Lys Asp Val Val Val Asp Ile Gln Arg Arg His Leu Arg
        195                 200                 205

Val Gly Leu Lys Gly Gln Pro Ala Ile Ile Asp Gly Glu Leu Tyr Asn
    210                 215                 220

Glu Val Lys Val Glu Glu Ser Ser Trp Leu Ile Glu Asp Gly Lys Val
225                 230                 235                 240

Val Thr Val His Leu Glu Lys Ile Asn Lys Met Glu Trp Trp Ser Arg
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Leu Val Ser Ser Asp Pro Glu Ile Asn Thr Lys Lys Ile Asn Pro Glu
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            260                 265                 270

Asn Ser Lys Leu Ser Asp Leu Asp Ser Glu Thr Glu Ser Met Val Glu
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Lys Met Met Tyr Asp Gln Arg Gln Lys Ser Met Gly Leu Pro Thr Ser
    290                 295                 300

Asp Glu Gln Lys Lys Gln Glu Ile Leu Lys Lys Phe Met Asp Gln His
305                 310                 315                 320

Pro Glu Met Asp Phe Ser Lys Ala Lys Phe Asn
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<213> Rattus rattus

<400> 13

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Met Ala Gln Gln His Glu Gly Gly Val Gln Glu Leu Val Asn Thr Phe
            20                  25                  30

Phe Ser Phe Leu Arg Arg Lys Thr Asp Phe Phe Ile Gly Gly Glu Glu
        35                  40                  45

Gly Met Ala Glu Lys Leu Ile Thr Gln Thr Phe Asn His His Asn Gln
    50                  55                  60

Leu Ala Gln Lys Ala Arg Arg Glu Lys Arg Ala Arg Gln Leu Thr Glu
65                  70                  75                  80

Arg Arg Glu Lys Ala Glu Arg Ala Ala Arg Leu Ala Lys Glu Ala Lys
                85                  90                  95

Ala Glu Thr Pro Gly Pro Gln Ile Lys Glu Leu Thr Asp Leu Lys Ala
            100                 105                 110

Glu Arg Leu Gln Leu Glu Ile Asp Gln Lys Lys Asp Ala Glu Asn His
        115                 120                 125

Glu Val Gln Leu Lys Asn Gly Ser Leu Asp Ser Pro Gly Lys Gln Asp
    130                 135                 140

Ala Leu Leu Glu Glu Asp Glu Glu Asp Glu Lys Asp Lys Gly Lys Leu
145                 150                 155                 160

Lys Pro Asn Leu Gly Asn Gly Ala Asp Leu Pro Asn Tyr Arg Trp Thr
                165                 170                 175
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Gln Thr Leu Ser Phe Leu Asp Leu Ala Val Pro Phe Arg Val Ser Phe
            180                 185                 190

Arg Leu Lys Gly Lys Gln Val Val Asp Ile Gln Arg Arg His Leu
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Arg Val Gly Leu Lys Gly Gln Ala Pro Val Ile Asp Gly Glu Leu Tyr
    210                 215                 220

Asn Glu Val Lys Val Glu Glu Ser Ser Trp Leu Ile Glu Asp Gly Lys
225                 230                 235                 240

Val Val Thr Val His Leu Glu Lys Ile Asn Lys Met Glu Trp Trp Asn
                245                 250                 255

Arg Leu Val Thr Ser Asp Pro Glu Ile Asn Thr Lys Lys Ile Asn Pro
            260                 265                 270

Glu Asn Ser Lys Leu Ser Asp Leu Asp Ser Glu Thr Arg Ser Met Val
        275                 280                 285

Glu Lys Met Met Tyr Asp Gln Arg Gln Lys Ser Met Gly Leu Pro Thr
    290                 295                 300

Ser Asp Glu Gln Lys Lys Gln Glu Ile Leu Lys Lys Phe Met Asp Gln
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His Pro Glu Met Asp Phe Ser Lys Ala Lys Phe Asn
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            20                  25                  30

Pro Tyr Lys Asn Thr Gln Thr Ile Arg Asp Val Asp Val Phe Thr Thr
        35                  40                  45

Ile Pro Val Ser Ala Asn Leu Lys Gly Arg Asp Leu Asp Val Val Leu
    50                  55                  60

Lys Lys Asp Ser Ile Lys Val Lys Val Lys Gly Glu Asn Gly Glu Val
65                  70                  75                  80
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Phe Ile Asp Gly Gln Phe Pro His Pro Ile Lys Pro Ser Glu Ser Ser
85 90 95

Trp Thr Leu Glu Thr Thr Ser Lys Pro Pro Phe Thr Gly Lys Glu Val
100 105 110

Ser Ile His Leu Asp Lys Val Asn Gln Met Glu Trp Trp Ala Met Val
115 120 125

Val Thr Thr Ala Pro Lys Ile Asp Val Ser Lys Ile Thr Phe Glu Asn
130 135 140

Ser Ser Leu Ser Asp Leu Asp Gly Glu Thr Arg Ala Met Val Glu Lys
145 150 155 160

Met Met Tyr Asp Gln Arg Gln Lys Glu Met Gly Ala Pro Thr Ser Asp
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Glu Gln Arg Lys Met Asp Ile Leu Lys Lys Phe Gln Lys Glu His Pro
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Glu Met Asp Phe Ser Asn Ala Lys Ile Gly
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20 25 30

Gly Lys Val His Leu Lys Asn Met Glu Trp Trp Val Pro Ile Lys Ile
35 40 45

Pro Glu Asn Ser Leu Ser Asp Leu Asp Glu Thr Arg Met Tyr Glu Lys
50 55 60

Met Met Tyr Asp Gln Arg Gln Lys Met Gly Pro Thr Ser Asp Glu Gln
65 70 75 80

Lys Ile Leu Lys Lys Phe His Phe Glu Met Asp Phe Ser
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<213> Homo sapiens

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<400> 16

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